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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/995,340	11/27/2001	Robert Vanstory Teeple	P50-0071	9659	
7590 04/05/2004			EXAMINER		
Michelin North America, Inc. Intellectual Property Department			FISCHER, JUSTIN R		
P.O. Box 2026	perty Department		ART UNIT	PAPER NUMBER	
Greenville, SC	29602		1733	1733	

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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•		Application No.	Applicant(s)				
		09/995,340	TEEPLE ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Justin R Fischer	1733				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the o	orrespondence address				
THE - Exte after - If the - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period vare to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed  /s will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 20 Ja	anuary 2004.					
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)□	Claim(s) <u>1-4 and 6</u> is/are pending in the applicate 4a) Of the above claim(s) <u>5 and 7-10</u> is/are with Claim(s) <u>is/are allowed.</u> Claim(s) <u>1-4 and 6</u> is/are rejected. Claim(s) <u>is/are objected to.</u> Claim(s) <u>are subject to restriction and/or and/or are subject to restriction and/or are subject.</u>	ndrawn from consideration.					
Applicat	ion Papers						
9)[	The specification is objected to by the Examine	r.					
10)[	The drawing(s) filed on is/are: a) acce	epted or b) $\square$ objected to by the I	Examiner.				
	Applicant may not request that any objection to the	• • • • • • • • • • • • • • • • • • • •	, ,				
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex		• • • • • • • • • • • • • • • • • • • •				
Priority (	under 35 U.S.C. § 119						
a)l	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachmen	t(s)	_					
	e of References Cited (PTO-892)	4) ☐ Interview Summary Paper No(s)/Mail Da					
3) Infor	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		eater Application (PTO-152)				
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#### **DETAILED ACTION**

## Response to Amendment

1. The declaration filed on January 20, 2004 under 37 CFR 1.131 has been considered but is ineffective to overcome the Chung reference. The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Chung reference. In particular, the declaration merely states that the inventors conceived and reduced the claimed invention- the declaration makes no indication as to what characteristics of the claimed invention were reduced to practice prior to the Chung reference. As depicted in the copy of written record (includes drawings), it is only evident that a tire having a multi-ply construction with a specific turnup structure around a rubber wedge was conceived- there is no description of several additional limitations contained within the claim language, for example the inclination angle of the radially inner and outer sides of the rubber wedge and the hardness of the rubber wedge (unclear if SH=145 corresponds to a Shore Hardness greater than 65). In this same regard, the declaration also fails to identify the tire construction as having an axially inner heel and an axially outer toe. Thus, it is evident that the declaration fails to provide a sufficient showing of the facts, in character and weight, so as to establish reduction to practice prior to the effective date of Chung or conception of the invention prior to the effective date of Chung coupled with due diligence from prior to said date to a subsequent to practice or to the filing of the application. It is suggested that applicant expressly identify the specific characteristics of the tire construction that were in applicant's possession

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(conception or reduction) prior to the effective date of Chung. Alternatively, applicant can provide a statement that identifies each of the claimed limitations that is not readily apparent or discernable from the declaration as being obvious in the art.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung (WO 02/076767) and further in view of Mechanics of Pneumatic Tires (Page 373). Chung is applicable as a prior art reference under 102(e) in light of the amendments associated with the American Inventors Protection Act of 1999 and the Intellectual Property and High Technology Technical Amendments Act of 2002. This rejection can be overcome by filing an affidavit or declaration under 37 CFR 1.131 showing prior invention.

As best depicted in Figures 1 and 4d, Chung is directed to a tire construction having at least one bead wire coated with a rubber matrix, at least one bead filler formed of a rubber mix disposed axially and radially outward of the bead wire, a rubber wedge 5 formed of a rubber mix having a Shore hardness between 95 and 100, a first carcass ply 3d' (reinforcement ply) wound on said bead wire and engaging the radially outer side of the rubber wedge, and a second carcass ply 3d wound on said bead wire and engaging the radially inner side of the rubber wedge. Chung, however, is

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completely silent as to the orientation of the carcass plies and thus necessarily fails to define the respective carcass plies as being "radial plies" or having reinforcing elements extending at an angle of approximately ninety degrees with respect to the equatorial plane of the tire. In any event, radial tire constructions are extensively used in the manufacture of modern day tires and have replaced the bias construction in a majority of tire designs. Mechanics of Pneumatic Tires (Page 373) has been applied to evidence the conventional and well-known use of "radial" tire constructions. As such, one of ordinary skill in the art at the time of the invention would have found it obvious to form the carcass plies of Chung as "radial" carcass plies.

It is noted that although Figure 4d of Chung does not expressly depict a bead filler, it is clearly evident from the description of the conventional tire of Figure 1 that a bead filler is present in the tire of Figure 4d. The inventive tire of Chung is not directed to eliminating the bead filler but rather is concerned with changing the winding method of the respective carcass plies and the characteristics/properties of the rubber wedge as compared to the conventional tire.

Regarding claim 2, as depicted in Figure 4d, the first carcass reinforcement 3d' surrounds the total perimeter of the rubber wedge, the second carcass reinforcement 3d is disposed axially outward of the first carcass reinforcement 3d', and the upturn of the first carcass reinforcement completely surrounds the upturn of the second carcass reinforcement.

With respect to claim 6, the respective inclination angles are depicted as being approximately between 20 and 30 degrees, which satisfies the limitations of the claimed

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invention. Although it is unclear if the drawings are working drawings, they can be used to obtain "gross relative dimensions". Furthermore, applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed inclination angles.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung (WO 02/076767) and Mechanics of Pneumatic Tires (Page 373) as applied in the rejection of claim 1 above and further in view of Mechanics of Pneumatic Tires (Page 362). While Chung is silent as to the specific bead construction, several bead core forming methods are conventionally used in the tire industry, including the use of a solid core wire surrounded by helically wound layers and the use of a single wire wound circumferentially to form a multiple turn coil, as shown for example by Mechanics of Pneumatic Tires (Page 362, Figures 3.6(e) and 3.6(b) respectively). As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to include either of the well-known and conventional bead constructions defined by the claimed invention in the tire design of Chung.

## Response to Arguments

5. Applicant's arguments filed January 20, 2004 have been fully considered but they are not persuasive. As noted above, the declaration is not sufficient to overcome the Chung reference.

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#### Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin R Fischer whose telephone number is (571) 272-1215. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Fischer

April 2, 2004

MARY EXAMINER GROUP 1300